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June 28, 2007

Air and Radiation Docket (6102T)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Attention: Docket ID No. EPA-HQ-OAR-2006-0859

Dear Sir or Madam:

The Interstate Natural Gas Association of America (INGAA), a trade association of the interstate natural gas pipeline industry, submits these comments on the U.S. EPA's advanced notice of proposed rulemaking (ANPRM) associated with residual risk and technology review for 22 industrial source categories subject to National Emission Standards for Hazardous Air Pollutants. The ANPRM was published in the Federal Register on March 29, 2007 at 72 FR 14734.

EPA has grouped these sources as Risk and Technology Review, Phase II, Group 2. EPA is soliciting comment on hazardous air pollutant (HAP) emissions and other model input data that EPA intends to use to assess residual risk from these 22 industrial major source categories. INGAA is especially interested in the data associated with 40 CFR, Part 63, Subpart HHH, also known as the Transmission and Storage (T&S) MACT and is submitting this letter to Docket ID No. EPA-HQ-OAR-2006-0859 based on review of the ANPRM and associated data provided by EPA for the T&S MACT source category.

INGAA member companies transport more than 90 percent of the nation's natural gas, through some 180,000 miles of interstate natural gas pipelines. INGAA member companies operate over 6,000 stationary natural gas-fired spark ignition IC engines and 1,000 stationary natural gas-fired combustion turbines, which are installed at compressor stations along the pipelines to transport natural gas to residential, commercial, industrial and electric utility customers. INGAA member companies have a history of working with the U.S. EPA Office of Air Quality Planning and Standards (OAQPS) on Part 60 and Part 63 standards that effect equipment used in natural gas transmission and storage, including stationary spark ignited reciprocating internal combustion (IC) engines and combustion turbines, as well as the original T&S MACT which was promulgated in

1999. In addition, representatives from INGAA member companies served on the Federal Advisory Committee, known as the Coordinating Committee, established for the Industrial Combustion Coordinated Rulemaking (ICCR) for the development of combustion standards. INGAA members served as Chair of the Reciprocating Internal Combustion Engine (RICE) Work Group under ICCR, as a member of the Combustion Turbine MACT Work Group, and as a member of the Boilers/Process Heaters Work Group. In supporting the development of MACT standards and New Source Performance Standard (NSPS), INGAA members have provided data and input integral to the technical foundation of these important regulations.

EPA is soliciting public comment on data the agency intends to use in analyzing risks from air toxics emitted from 22 industrial sectors. EPA will use the data to conduct risk analyses to determine if additional standards are needed to address remaining risks from the 22 sectors. In addition, EPA will perform a technology review for each sector. These analyses are required by the Clean Air Act as part of the process to assess the risks remaining after these industrial sectors have complied with earlier technology based emission standards. The Subpart HHH T&S MACT is one of these industrial sectors, and INGAA comments are in regard to this industrial sector.

In the Source Category Data Summary document for natural gas transmission and storage provided by EPA on its website, EPA specifically requests comment on the following:

- Information regarding the facilities in the ANPRM dataset and whether any are not T&S sources;
- Whether the database facilities are major or area HAP sources;
- Uncertainty regarding formaldehyde emissions from the source category;
- Information on the potential for mercury emissions; and
- Review of coordinates for identified facilities.

INGAA's comments address these and other issues in the ANPRM. INGAA members constitute the vast majority of interstate pipeline operators in the U.S. and review of the database focused on INGAA member facilities. However, T&S MACT facilities and facilities in the EPA database include intrastate pipeline operators, upstream operators, and distribution companies with storage. Thus, a detailed review was not completed for every facility in the dataset. INGAA's comments are detailed below and include:

1. Based on INGAA's review, 50 T&S facilities in the dataset are operated by INGAA members. Of these facilities, 33 are area sources. An additional four facilities are not T&S facilities and an additional 8 facilities do not include a glycol dehydrator. Seven of the 50 facilities are T&S facilities that were included in the ONG data set. Due to the prevalence of problems with the dataset, EPA should provide an additional opportunity for stakeholder comment on the T&S MACT dataset after revised data are available.

2. INGAA does not support EPA's proposed approach that would assume all facilities in the NEI dataset are major sources unless otherwise verified. It is apparent that many facilities are not major sources and that the dataset has numerous errors. EPA should ensure that the facilities included in the analysis are major HAP sources.
3. For natural gas facilities, formaldehyde emissions are typically associated with natural gas combustion, especially for reciprocating internal combustion engines. The T&S MACT affected equipment is the dehydrator reboiler vent. Risk review under this rulemaking should not consider HAP emissions from co-located combustion units such as engines or boilers that are addressed by separate MACT standards.
4. Acrolein is identified as the key non-carcinogenic HAP emitted by T&S facilities. Only one facility in the database reported acrolein emissions. INGAA has identified this facility and confirmed that the acrolein emissions are from internal combustion engines and not equipment associated with the T&S MACT. The acrolein data should not be considered for the T&S source category.
5. In response to EPA's request for information on mercury, INGAA notes that mercury is not an issue for T&S facilities.
6. The database presents annual emissions and EPA indicates in the ANPRM that short-term exposure analysis will assume that maximum hourly emission rates are ten times higher than the annual average hourly rate. This assumption is arbitrary and inappropriate.
7. Corrections to facility-specific data fields have been completed. A brief summary is reported here.

INGAA appreciates the opportunity to comment on this rulemaking and plans to review and comment on the proposed rule planned for release this fall. If you have any questions, please contact me at lbeal@ingaa.org or 202-216-5935.

Sincerely,



Lisa Beal
Director, Environment and Construction Policy
Interstate Natural Gas Association of America

cc (by email): Paula Hirtz, Office and Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), U.S. EPA, Research Triangle Park, NC 27711 (hirtz.paula@epa.gov)

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**COMMENTS ON THE ADVANCED NOTICE OF PROPOSED RULEMAKING
RISK AND TECHNOLOGY REVIEW, PHASE II, GROUP 2:
TRANSMISSION AND STORAGE MACT FACILITIES (40 CFR, PART 63, SUBPART HHH)**

**72 Federal Register 14734
March 29, 2007**

**Submitted by:
Interstate Natural Gas Association of America (INGAA)
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The cover letter with this transmittal provides background on INGAA and a summary of INGAA comments on the U.S. EPA's advanced notice of proposed rulemaking (ANPRM) associated with residual risk and technology review for 22 industrial source categories subject to National Emission Standards for Hazardous Air Pollutants. This Risk and Technology Review, Phase II, Group 2 announcement was published in the Federal Register on March 29, 2007 at 72 FR 14734. Detailed INGAA comments follow.

INGAA comments address the Natural Gas Transmission and Storage (T&S) MACT source category. As discussed in Comment 1, INGAA has identified a number of facilities in the EPA dataset that are not T&S major sources. EPA should correct the database to ensure that these facilities are properly categorized. INGAA has only made revisions to the EPA dataset for specific fields within a facility-specific entry. INGAA has *not* made changes to the EPA dataset that would delete an entire facility due to area source status or improper classification as a T&S facility. INGAA believes that it is more appropriate for EPA to make these corrections.

- 1. Based on INGAA's review, 50 T&S facilities in the dataset are operated by INGAA members. Of these facilities, 33 are area sources. An additional four facilities are *not* T&S facilities and an additional 8 facilities do not include a glycol dehydrator. Seven of the 50 facilities are T&S facilities that were included in the ONG data set. Due to the prevalence of problems with the dataset, EPA should provide an additional opportunity for stakeholder comment on the T&S MACT dataset after revised data is available.**

A number of the facilities included in the T&S dataset provided by EPA are operated by INGAA member companies and we have reviewed the information associated with 43 facilities. In addition, we identified seven facilities in the Oil and Natural Gas Production (ONG) MACT dataset that should be in categorized under T&S.

The results of INGAA's review of member company facilities are summarized in Table 1. As shown in the table, most of these facilities are not T&S major source facilities. For example, many facilities are area sources, and others are not T&S facilities. In addition, a number of facilities meet the definition of a T&S facility, but do not include a glycol dehydrator, which is the affected equipment for the T&S MACT.

EPA has requested that revisions be made to the database, and some edits have been completed to the appropriate data field for INGAA member company T&S MACT facilities. A summary of the data field revisions is included in Comment 7. However, changes were *not* made to EPA's data that would delete facilities that are not T&S facilities or to properly designate T&S area source facilities. Based on the information in Table 1, EPA should delete the non-T&S facilities from its database and either delete area source facilities or add a data field to denote whether the facility is a major or area source for HAPs.

As shown in Table 1, deficiencies for the subset of INGAA sources clearly indicate that the EPA dataset is rife with errors and inconsistencies regarding proper classification of T&S MACT major sources. Seven facilities should be added to the T&S category that are in the ONG dataset, which results in 50 T&S facilities operated by INGAA members in the EPA data. Of these seven facilities, five are area sources while another does not include a glycol dehydrator. A summary of findings regarding the fifty facilities in Table 1 indicates:

- 33 of the 50 facilities are area sources and another will be an area source following changes in 2007;
- An additional 4 of the 50 facilities are not T&S facilities;
- An additional 8 of the 50 facilities do not include a glycol dehydrator; and
- One facility is no longer in service.
- The remaining four (of 50) facilities in the EPA dataset appear to be major sources that include glycol dehydrators.

INGAA has only commented on those facilities operated by INGAA members, but based on the prevalence of issues, the other facilities in EPA's database surely include similar errors – especially concerning classification as a major source. It is imperative that EPA base the residual risk review on facilities and source attributes for *major sources* within the Transmission and Storage, Part 63 Subpart HHH source category. In addition to the anomalies discussed in these comments, there appear to be anomalies associated with the Source Classification Code (SCC) and SCC description fields in the database. EPA should ensure that dehydrator and other source emissions are correctly identified before conducting the risk analysis.

Due to the need to substantially revise the EPA dataset, INGAA requests that once EPA completes its review of comments and updates to the dataset, that EPA provide an additional opportunity for stakeholder comment on the revised T&S MACT dataset. This will provide INGAA and other stakeholders the necessary opportunity to review the data that identifies the key attributes and source characteristics to be used in EPA's analysis. This review will help ensure that appropriate corrections and considerations are integrated into the data that will serve as the basis for EPA's risk analysis.

In addition to the facilities listed in Table 1, two facilities in the T&S dataset are identified as facilities owned by Columbia Gas Transmission, an INGAA member company. The following facilities have changed ownership and should be corrected in the database.

- Columbia Ellamore Compressor Station (NEI WV0101) is no longer owned by Columbia.
- Columbia Kermit Compressor Station (NEI WV0590017) is no longer owned by Columbia.

Table 1. EPA T&S Dataset for INGAA Member Company Facilities – Status and Required Corrections

| <u>Company</u> | <u>Station</u> | <u>NEI Site ID</u> | <u>Status/Action</u> |
|----------------|---|--------------------|---|
| Centerpoint | Mississippi River Transmission Corp - St Jacob CS | NEIIL119818A | Facility does <u>not</u> include a glycol dehydrator. |
| Centerpoint | Mississippi River Transmission Corp - St Jacob Dehy | NEIIL1198AAB | Not a major HAP source - label as area source. |
| Centerpoint | Centerpoint/Ruston Central - Ruston CP | NEILA0610035 | Not a T&S facility - remove from dataset. |
| Centerpoint | CEG Transmission Company - Chiles Dome | NEIOK2109 | Not a major HAP source (permitted controls added to dehy) - label as area source. |
| Centerpoint | CEG Transmission Company - Ada Storage | NEIOK2128 | Not a major HAP source - label as area source. |
| Centerpoint | CEG Transmission Co. - Ruston Storage | NEILA0610027 | T&S facility that was mistakenly included in ONG database rather than T&S database; Not a major HAP source - label as area source. |
| Centerpoint | CEG Transmission Co. – Calhoun CS | NEILA0730064 | T&S facility that was mistakenly included in ONG database rather than T&S database; Not a major HAP source - label as area source. |
| Columbia | Carbon CS | NEI930 | Facility no longer owned by Columbia and is no longer in service. |
| Columbia | Coco CS | NEIWV0049 | Facility no longer includes a dehydrator; Not a major HAP source - label as area source. |
| Columbia | Adaline CS | NEI1110 | Not a major HAP source - label as area source. |
| Columbia | Glady CS | NEI5627 | Not a major HAP source - label as area source. |
| Columbia | Huff Creek CS | NEI5631 | Not a major HAP source - label as area source. |
| Columbia | Artemas CS | NEIPA4200900 | Not a major HAP source - label as area source. |
| Columbia | Hubball CS | NEIWV0430002 | Not a major HAP source - label as area source. |
| Dominion | Rochester Hills | NEIPA0633-16 | Not a major HAP source - label as area source. |
| Dominion | Cherry Tree CS | NEIPA0633-28 | Not a major HAP source - label as area source. |
| Dominion | Cornwell CS | NEIWV0051 | ONG facility, not a T&S facility (remove from T&S dataset). |

Table 1. (continued)

| <u>Company</u> | <u>Station</u> | <u>NEI Site ID</u> | <u>Status/Action</u> |
|----------------|---|--------------------|--|
| Dominion | Yellow Creek CS | NEI WV0130001 | ONG facility, not a T&S facility (remove from dataset). |
| El Paso – CIG | Watkins Station | NEI 1421 | T&S facility was that mistakenly included in ONG database rather than T&S database; Dessicant drying of air only – no natural gas dehydration. |
| El Paso – CIG | Latigo CS | NEI1443 | T&S facility that was mistakenly included in ONG database rather than T&S database; Not a major HAP source - label as area source. |
| El Paso – CIG | Flank Station | NEI892 | Facility in ONG database, but facility is both a T&S and ONG facility with multiple dehyds; Not a major HAP source - label as area source. |
| El Paso – CIG | Vilas CS | NEI1699 | T&S facility that was mistakenly included in ONG database rather than T&S database; Not a major HAP source - label as area source. |
| El Paso – TGP | TGP Station 821, Cameron Parish, LA | NEILA0054 | T&S facility that was also mistakenly included in the ONG database. Not a major HAP source - label as area source. |
| El Paso – TGP | TGP Station 523, Terrebonne Parish, LA | NEILA1090014 | T&S facility that was also mistakenly included in the ONG database. Not a major HAP source - label as area source. |
| El Paso – TGP | TGP Station 524, Lafourche Parish, LA | NEILA13590 | Not a major HAP source - label as area source. |
| El Paso – TGP | TGP Station 229, NY | NEINY029R005 | T&S facility that was mistakenly included in ONG database rather than T&S database. |
| Gulf South | Longview #2 CS | NEI2TX18390 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Gulf South | Edna CS | NEI6582 | Facility does <u>not</u> include a glycol dehydrator. Major HAP source. |
| Gulf South | Refugio CS | NEI7050 | Facility does <u>not</u> include a glycol dehydrator (only has desiccant type dehydrators). Major HAP source. |
| Gulf South | Latex CS | NEITXRPB0013 | Not a major HAP source - label as area source. Facility does have a glycol dehydrator. Sold by Gulf South in 2004. |
| Kinder Morgan | Natural Gas Pipeline of America - Station 204 | NEI2IA02-007 | Major Source T&S source. |
| Kinder Morgan | Natural Gas Pipeline of America - Station 205 | NEI2IA183001 | Not a major HAP source - label as area source. |
| Kinder Morgan | KN Gas Gathering Station | NEI2KS055008 | Not a major HAP source - label as area source. |

Table 1. (continued)

| <u>Company</u> | <u>Station</u> | <u>NEI Site ID</u> | <u>Status/Action</u> |
|-----------------------|---|--------------------|---|
| Kinder Morgan | Station 343 | NEI8362 | Facility does <u>not</u> include a glycol dehydrator. Facility will be an area source in 2007 based on controls being installed. |
| Kinder Morgan | Natural Gas Pipeline Company | NEIIL0417923 | Not a major HAP source - label as area source. |
| Kinder Morgan | Natural Gas Pipeline of America - Station 201 | NEIIL0918573 | Not a major HAP source - label as area source. |
| Kinder Morgan | Kinder Morgan Interstate Gas | NEIKS0930002 | Not a major HAP source - label as area source. |
| Kinder Morgan | KMIGT Grand Island Compressor | NEINE00091 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Kinder Morgan | KMIGT Albion CS | NEINE0110001 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Kinder Morgan | KMIGT Cozad CS | NEINE15697 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Kinder Morgan | KMIGT Lexington CS | NEINE15698 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Kinder Morgan | KMIGT Holdredge CS | NEINE15767 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Northern Natural Gas | Redfield Compressor | NEI2IA05-002 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Northern Natural Gas | Northern Natural Gas Company (Otoe County) | NEINE1310002 | Facility does <u>not</u> include a glycol dehydrator. Major Source in T&S database, but emissions are from IC engines and a boiler. |
| Northern Natural Gas | Northern Natural Gas Co. (Kearney County) | NEIKS13032 | ONG facility, not a T&S facility (remove from T&S dataset). Not a major HAP source - label as area source. |
| Panhandle Trunkline | Panhandle Eastern PL Company (Houstonia) | NEI47118 | Facility does <u>not</u> include a glycol dehydrator. |
| Panhandle Trunkline | Panhandle Eastern PL Company (Centralia CS) | NEI47119 | Facility does <u>not</u> include a glycol dehydrator. |
| Panhandle Trunkline | Panhandle Eastern PL Co. (Woods County) | NEIOK2372 | Major HAP source with one dehydrator. Edits made to EPA data for stack characteristics. |
| Williams Gas Pipeline | Transcontinental Gas Pipeline (Station 35) | NEI11297 | Facility does <u>not</u> include a glycol dehydrator. Not a major HAP source - label as area source. |
| Williams Gas Pipeline | Transcontinental Gas Pipe Line CS 54 | NEILA0970029 | T&S facility was also mistakenly included in the ONG database. Major HAP source. |

2. INGAA does not support EPA's proposed approach that would assume all facilities in the NEI dataset are major sources unless otherwise verified. It is apparent that many facilities are not major sources and that the dataset has numerous errors. EPA should ensure that the facilities included in the analysis are major HAP sources.

In its T&S Source Category Data Summary document, EPA indicates that, "Without verification of the area source status of individual facilities, EPA will likely consider all plants in the NEI to be major sources in future risk assessments." This assumption is arbitrary and without merit. The Clean Air Act requires risk review for major sources and EPA should properly identify major source facilities. As noted in the previous comment, the NEI data set is rife with errors. INGAA's review of a subset of the facilities from the NEI dataset indicates that the vast majority are not HAP major sources.

If EPA does not receive comment on other NEI facilities, it is improper to presume that all plants are major sources when INGAA review of a sizable subset of NEI facilities indicates obvious and pervasive deficiencies in the dataset. INGAA's review identified 50 member company sources and 33 are area sources. Two additional facilities in the T&S database are not T&S facilities, and still others are not T&S affected facilities because they do not include a glycol dehydrator.

In addition, EPA estimated that only seven major sources existed during development of Subpart HHH, while the current EPA T&S dataset includes 123 facilities. EPA has not explained this significant difference and should ensure that the facilities included in the risk review and analysis are major HAP sources. One avenue available to EPA to assess major versus area source status is the reported emissions associated with each plant in the NEI dataset. INGAA strongly recommends that proper attention be given to facility major source status before proceeding with the risk analysis. It is inappropriate to use obviously flawed assumptions that could result in inappropriate analysis and faulty conclusions.

3. For natural gas facilities, formaldehyde emissions are typically associated with natural gas combustion, especially for reciprocating internal combustion engines. The T&S MACT affected equipment is the dehydrator reboiler vent. Risk review under this rulemaking should not consider HAP emissions from co-located combustion units such as engines or boilers that are addressed by separate MACT standards.

EPA requested comment on formaldehyde emissions for this source category. The database reports formaldehyde for thirteen facilities. The T&S MACT includes emissions from all facility equipment in determining major source status. However, the only combustion equipment affected by the T&S MACT is associated with the dehydrator regenerator vent. There are other likely formaldehyde emission points for the T&S source category, such as co-located IC engines, turbines, or process heaters. However, this combustion equipment is regulated under separate MACT standards.

For the T&S sources, the main source of formaldehyde is co-located reciprocating internal combustion engines that drive natural gas compressors, and these engines are in the RICE MACT source category. Other co-located combustion equipment that may emit trace levels of

formaldehyde includes turbines that drive natural gas compressors or small process heaters or boilers. For risk review under this rulemaking, HAP emissions from combustion units other than the dehydrator reboiler should *not* be considered, as the emissions will be considered during risk review for the respective standard.

Regarding specific comment on the formaldehyde data, the formaldehyde source is not clearly identified for most of the thirteen sources in the NEI dataset. Two sources are labeled as “fugitive” emissions associated with natural gas leaks and this appears inappropriate as formaldehyde is not a naturally occurring constituent in gas but rather a combustion by-product. Six of the sources are identified as “solvent evaporation”. Emissions from these units are as high as 1.9 TPY, and this is an inordinately high value for solvent losses. INGAA has identified several of these sources as area sources. However, INGAA did not specifically identify whether the formaldehyde emission levels or Source Classification Code should be revised for these sources. Where appropriate, the area source designation should ensure that these sources are not included in the risk review.

Seven of the thirteen facilities are INGAA member company facilities and comments regarding formaldehyde emissions for these sources are shown in Table 2. INGAA cannot offer more specific comments on the other six facilities with reported formaldehyde (i.e., not INGAA member companies).

Table 2. Summary of INGAA Member Company Formaldehyde Data in EPA Dataset.

| NEI Site ID | Site Name | Comment |
|--------------|--|---|
| NEINE0110001 | KMIGT ALBION COMPRESSOR STA | Area Source; No dehydrator located at this site. |
| NEI47118 | PANHANDLE EASTERN PIPE LINE CO-HOUSTONIA | No dehydrator located at this site. Reported formaldehyde is <0.01 TPY. |
| NEINE15697 | KMIGT COZAD COMPRESSOR STATION | Area Source; No dehydrator located at this site. |
| NEINE00091 | KMIGT GRAND ISLAND COMPRESSOR | Area Source; No dehydrator located at this site. |
| NEINE15767 | KMIGT HOLDREGE COMPRESSOR STA | Area Source; No dehydrator located at this site. |
| NEINE15698 | KMIGT LEXINGTON COMPRESSOR STA | Area Source; No dehydrator located at this site. |
| NEINE1310002 | NORTHERN NATURAL GAS COMPANY (Otoe County, NE) | No dehydrator located at this site; Major Source status for HAPs due to engine emissions. Formaldehyde is from IC engines, not T&S MACT affected equipment. |

For the Northern Natural Gas facility, there is additional discussion in the next comment validating that the reported formaldehyde is from engines. Formaldehyde for five of the remaining six sources in Table 2 is associated with area sources. The other facility reports very low levels of formaldehyde from solvents and these emissions are inconsequential.

EPA should revise the NEI database to reflect the area source status for the facilities identified in the table. As noted in Comments 4 and 7, the NEI database has been revised to clarify that formaldehyde emissions from the Northern Natural Gas facility are associated with IC engines and the RICE MACT standard. The risk and technology review associated with IC engine emissions should be addressed under the separate RICE MACT standard. Since it is apparent that formaldehyde is typically not associated with T&S MACT affected equipment, EPA should more closely review the other six facilities that are not owned by INGAA member companies that report formaldehyde emissions. This review should ensure that the facilities are major sources and that the formaldehyde emissions are due to T&S sources and not co-located combustion sources with separate MACT standards.

4. Acrolein is identified as the key non-carcinogenic HAP emitted by T&S facilities. Only one facility in the database reported acrolein emissions. INGAA has identified this facility and confirmed that the acrolein emissions are from internal combustion engines and not equipment associated with the T&S MACT. The acrolein data should not be considered for the T&S source category.

Acrolein is identified in the Source Category Data Summary document as the key non-carcinogenic HAP and accounts for over 92 percent of the toxicity weighted non-carcinogenic emissions. However, acrolein is only reported for one facility in the database and the reported emissions are for reciprocating internal combustion engines. The RICE source category is addressed by a separate MACT (Part 63, Subpart ZZZZ) and these emissions should not be considered for the T&S source category.

Review of the EPA NEI dataset indicates that the sole T&S facility reporting acrolein is NEI Site Identification Number NEINE1310002. This facility is also included in Table 2 as presented in the previous comment discussing formaldehyde. The facility is owned by an INGAA member, and we have confirmed that these emissions are associated with IC engines. The emission source type is also evident from the reported emission estimates, which are clearly based on AP-42 emission factors for four-stroke lean burn engines (i.e., the relative ratios for the reported HAPs are consistent with the ratios of the AP-42 emission factors). In addition to aldehydes, hexane and methanol are also listed for the source.

The NEI database has been edited for this facility. The current EPA dataset lists the Source Classification Code (SCC) as 39999999 and SCC Description as Miscellaneous Process. These fields have been edited in the dataset for each of the five HAP entries for this facility to:

- Change the “SCC” field to “20200207”;
- Change the “SCC Description” field to “Internal Combustion Engine, Industrial, Natural Gas, Reciprocating, Exhaust”; and
- Change the “MACT Source Category” field to “Reciprocating Internal Combustion Engine”.

Since the RICE MACT addresses HAPs from engines, these emissions should not be considered for the T&S MACT technology and risk review. In addition, there are concerns regarding acrolein measurement, and INGAA will comment on this issue as appropriate when the risk review is undertaken for the relevant MACT standard

5. In response to EPA's request for information on mercury, INGAA notes that mercury is not an issue for T&S facilities.

Mercury can be present at trace levels at the wellhead for some natural gas producing fields and the websites referenced by EPA in the Source Category Data Summary document are associated with this issue. However, mercury present in raw, unprocessed field gas is removed during gas processing to avoid problems associated with mercury's affinity for aluminum and other metal surfaces. Public domain reports document that mercury is not an issue for processed natural gas at T&S facilities.

In EPA's Source Category Summary Document, information is requested on the potential for mercury emissions from the T&S source category. Note that this issue was discussed with EPA during the Industrial Combustion Coordinated Rulemaking (ICCR) process, where it was concluded that mercury is not an issue for natural gas combustion, especially for sources away from the wellhead, because processing would remove any trace levels of mercury that may be present in raw gas.

There are several Gas Research Institute (GRI) reports from the 1990's that investigated trace constituents in natural gas, including mercury. These reports may still be available through the Gas Technology Institute. The reports conclude that mercury is not present at meaningful levels within the gas transmission system. The GRI reports include:

- GRI Report Number GRI-94/0232.2 from 1994 conducted detailed analysis of natural gas from across the U.S., with 19 samples representing gas from twelve different producing areas, including Canadian gas. Mercury results showed that 18 of the 19 samples were less than the method detection limit and the other sample indicated a measured value at the detection limit of $0.02 \mu\text{g}/\text{m}^3$. Thus, 18 of 19 samples measured $<0.02 \mu\text{g}/\text{m}^3$ and all samples measured $\leq 0.02 \mu\text{g}/\text{m}^3$.
- In 1999, a follow-up to the 1994 report was completed using enhanced methods to reduce the detection limit for trace gas species. Gas from a single Midwestern site was analyzed and the results are presented in GRI Report Number GRI-99/0111. The mercury measurement method detection limit was $0.01 \mu\text{g}/\text{m}^3$. Multiple samples were collected over several weeks and all results were less than the detection limit. Even if it is assumed that all natural gas contains mercury equivalent to this method detection limit, the maximum *hypothetical* mercury from total annual U.S. consumption (i.e., assume approximately 22 TCF) containing $0.01 \mu\text{g}/\text{m}^3$ of mercury is less than fourteen pounds per year.

These reports document that mercury is not present at meaningful levels in processed gas. In addition, it is understood that some producing fields include trace levels of mercury at the wellhead. However, mercury has an affinity for metallic surfaces and it is important to remove mercury from such gas streams to avoid potential equipment damage and address safety concerns associated with amalgamation and embrittlement that can occur on metallic surfaces due to mercury's affinity for aluminum and other metals.

A 1996 GRI report, GRI Topical Report Number GRI-96/0018, investigated trace constituents in unprocessed natural gas. This report indicates that trace levels of mercury can be found for some natural gas reservoirs, but any mercury present is very low. Naturally occurring mercury content varies geographically throughout the world, with North American fields exhibiting lower levels than those in other locations such as Asia. From the GRI report, measured samples indicate non-detectable or trace levels of mercury with a maximum measured level for North American gas samples of $15 \mu\text{g}/\text{m}^3$. However, the raw gas mercury will not be transported downstream due to mercury's affinity for metallic surfaces, which requires mercury removal from gas streams during initial processing for even trace levels. The GRI report discusses mercury removal technology that is necessary for mercury containing reservoirs to avoid equipment damage. Reservoirs that contain trace mercury have an incentive to address the issue in order to avoid costly equipment damage and the report notes that mercury above $0.1 \mu\text{g}/\text{m}^3$ may cause problems.

Thus, even if trace mercury is present in a particular reservoir, initial processing will remove mercury to avoid issues associated with metal embrittlement or corrosion (primarily aluminum surfaces in cryogenic process equipment).

Regarding the three links to on-line material reported by EPA in the T&S Source Category Data Summary document, these links consider mercury issues discussed in this comment. The first two links discuss mercury removal from wellhead gas (i.e., technology solutions analogous to the GRI report discussion) and the third references a paper that discusses issues associated with mercury management for a reservoir that includes trace mercury. Thus, these references do not indicate that mercury is an issue for T&S sources.

6. The database presents annual emissions and EPA indicates in the ANPRM that short-term exposure analysis will assume that maximum hourly emission rates are ten times higher than the annual average hourly rate. This assumption is arbitrary and inappropriate.

EPA indicates in the ANRPM [72 FR 14749] that, "to screen for potentially significant short-term exposures, maximum short-term (one-hour) emission rates will be developed by multiplying the average annual hourly emission rates by ten." INGAA does not support this approach. INGAA recommends that the hourly rates assumed for short term exposure assessment should be based directly on the reported value in the database. Alternatively, EPA should consider the source type, the reported emissions data, and typical operations.

EPA states in the support document that inventory emissions are based on actual operations and typically lower than maximum emission rates. However, INGAA believes that inventory reports are often conservatively based on maximum rates or potential emissions. In addition, anomalous events such as emergency shutdowns are included in the EPA dataset, and these represent a high-end estimate associated with atypical operation, but provide a rate that can at least be considered as the basis for a maximum estimate. There is nothing in the operation of T&S facilities that lends support for an order of magnitude multiplier, and EPA has not provided rationale to justify the multiplier, which appears to be arbitrary and unsupported.

At a minimum, if EPA pursues analysis using this multiplier, INGAA recommends that if analysis indicates that short term impacts are higher than the “low risk” designation (i.e., target organ-specific hazard index of one), then further, detailed analysis on the ten-fold emission rate assumption should be completed before proceeding with additional risk review.

7. Corrections to facility-specific data fields have been completed. A brief summary is reported here.

As instructed by EPA, corrections to data fields have been completed. However, as discussed in Comment 1, INGAA has only changed data fields within specific entries. Two larger issues that EPA should address include: (1) Deleting facilities that are not T&S facilities from the T&S dataset and (2) Deleting or labeling area source facilities in the T&S MACT dataset. Based on the information provided in Table 1 and as discussed in Comment 1, INGAA recommends that EPA make appropriate changes to the database for those facilities.

Separate from the facility level changes needed, INGAA completed several revisions to data fields in the EPA dataset. The changes were submitted to the docket on Wednesday, June 27 and are reflected in the file “0504Revisions_McGrath.xls”. The revisions include:

- As discussed in Comment 4, changes have been made to the Northern Natural Gas Otoe, NE facility (NEINE1310002) to properly identify the dataset emission source as IC engines.
- Stack parameters were corrected for the Panhandle Woods County facility (NEIOK2372).

In addition to these changes, EPA should address discrepancies associated with T&S facilities identified in Table 1 that are currently in the ONG MACT dataset:

- Centerpoint Ruston Storage facility – NEILA0610027 (delete from ONG dataset).
- Centerpoint Calhoun Compressor Station – NEILA0730064 (delete from ONG dataset).
- El Paso CIG Watkins Compressor Station – NEI1421 (delete from ONG dataset).
- El Paso CIG Latigo Compressor Station – NEI1443 (delete from ONG dataset).
- El Paso CIG Vilas Compressor Station – NEI1699 (delete from ONG dataset).
- El Paso CIG Flank Compressor Station – NEI1892 (includes ONG and T&S facility).
- El Paso TGP Station 229 – NEINY029R005 (delete from ONG dataset)
- El Paso TGP Stations 821 and 523 are included in both the T&S and ONG data set. These facilities should be removed from the ONG dataset. In addition, both are area sources (as noted in Table 1).
- Transcontinental Gas Pipeline Compressor Station 54 – NEILA0970029, is mistakenly included in both the T&S and ONG dataset (delete from ONG dataset).

When addressing these facilities from the ONG dataset, EPA must also document the special circumstances associated with these facilities identified in Table 1 (e.g., these are area source facilities in many cases).